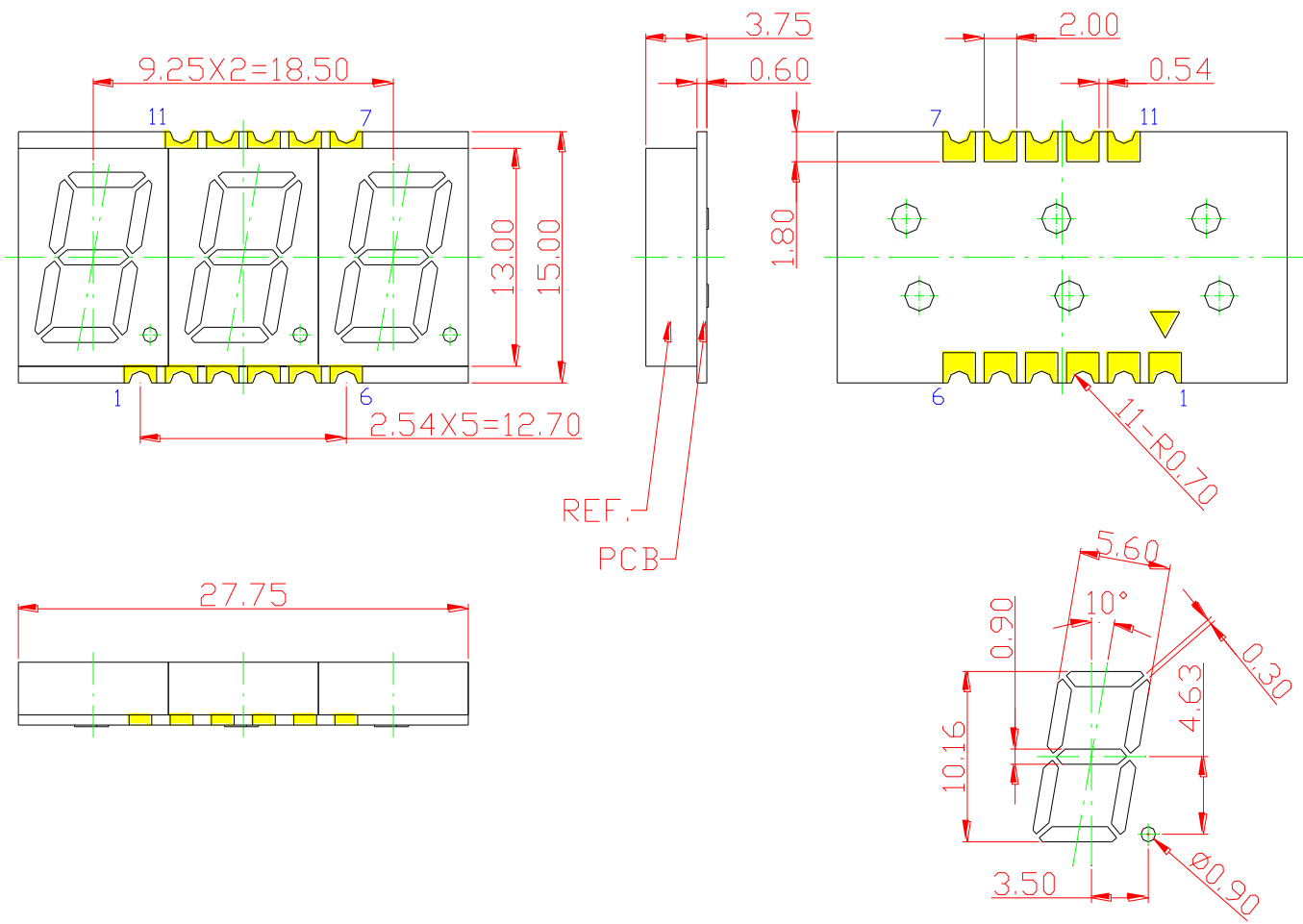


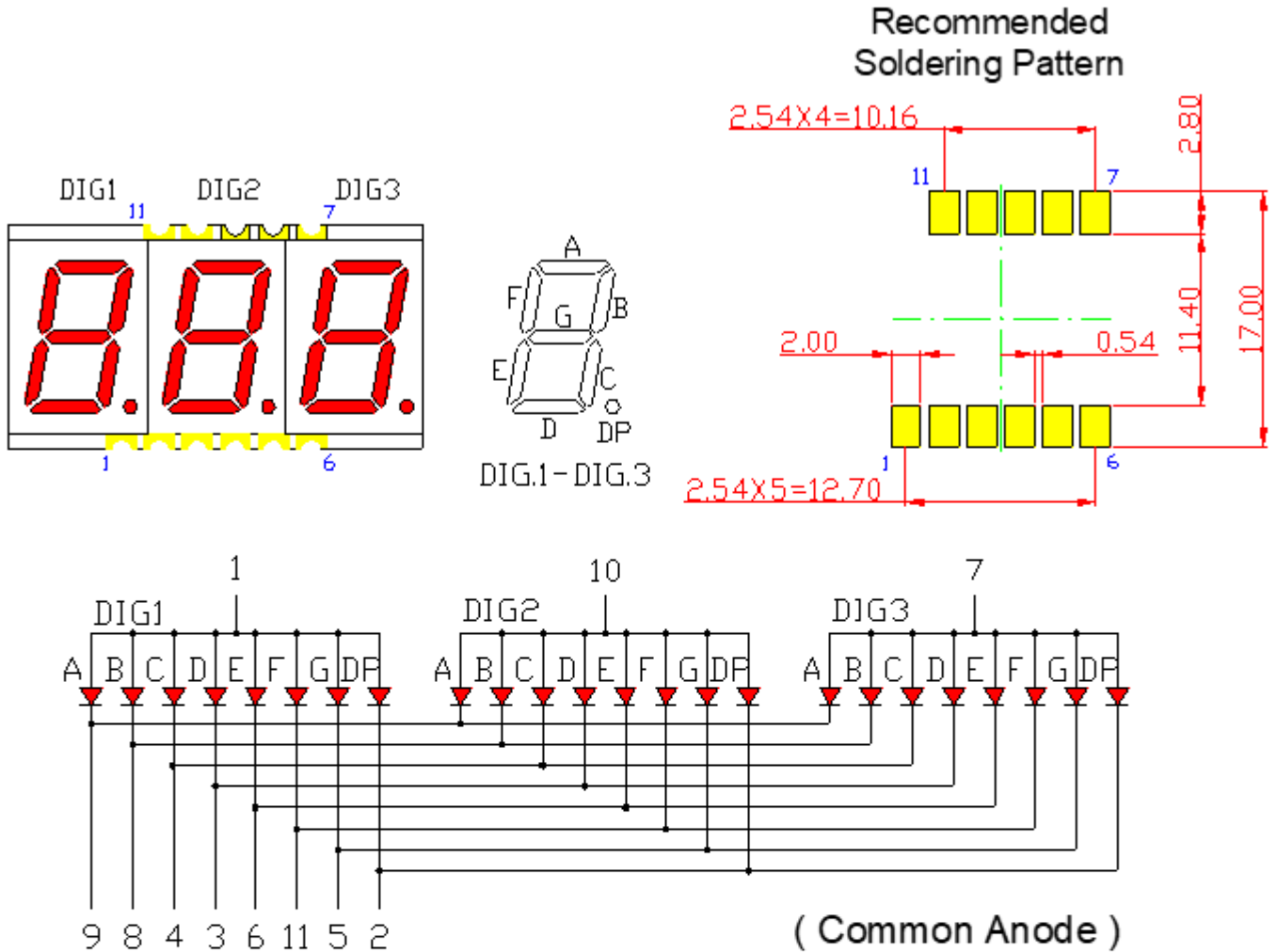
SPECIFICATIONS **SDTA40R2W**
MECHANICAL DIMENSIONS


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

| Part Number | Chip Material | Color of Emission | Lens Type | Description |
|-------------|---------------|-------------------|---------------|--------------|
| SDTA40R2W | InGaAlP | Red | White Segment | Common Anode |



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SPECIFICATIONS
TYPICAL INTERNAL EQUIVALENT CIRCUIT

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.



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ABSOLUTE MAXIMUM RATINGS (TA=25°C)

| Parameter | Symbol | | Unit |
|---|--------|----------|---------|
| Power Dissipation per Dice | PAD | 48 | mW |
| Derating Liner from 25°C per Dice | - | 0.28 | mA / °C |
| Continuous Forward Current per Dice | IAF | 20 | mA |
| Peak Current per Dice (duty cycle 1/10, 1kHz) | IPF | 40 | mA |
| Reverse Voltage per Dice | VR | 5 | °C |
| Operating Temperature | TOPR | -40~+105 | °C |
| Storage Temperature | TSTG | -40~+105 | °C |

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

| Characteristic | Symbol | Condition | Value | | | Unit |
|---------------------------------------|--------|-----------|-------|-------|------|------|
| | | | Min. | Type. | Max. | |
| Forward Voltage per Dice | VF | IF =20mA | | 2.1 | 2.4 | V |
| Reverse Current per Dice | IR | VR = 5V | | - | 10 | µA |
| Peak Wavelength per Dice | λP | IF =20mA | - | 632 | - | nm |
| Dominant Wavelength per Dice | λD | IF =20mA | - | 625 | - | nm |
| Luminous Intensity | IV | IF =20mA | - | 35 | - | mcd |
| Spectral Radiation Bandwidth per Dice | Δλ | IF =20mA | - | 20 | | nm |

*Tolerance of viewing angle: -10 / +5 deg.



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OPTICAL CHARACTERISTIC CURVES

Typical Electro-optical Characteristic Curves (25 °C Free Air Temperature Unless Otherwise Specified)

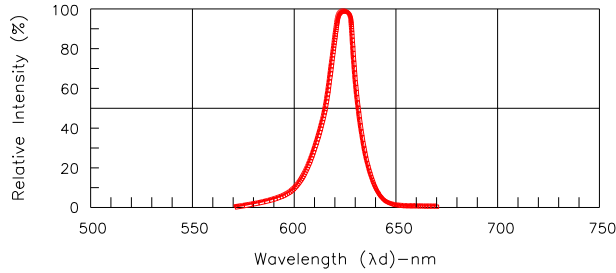


Fig.1-Relative Intensity VS. Wavelength

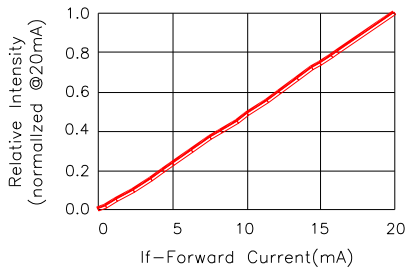


Fig.2-Relative Luminous Intensity vs. Forward Current

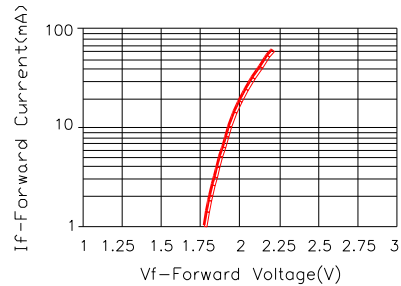


Fig.3-Forward Current vs. Forward Voltage

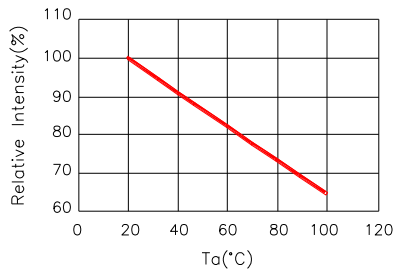


Fig.4-Relative Intensity(@20mA) vs. Ambient Temperature

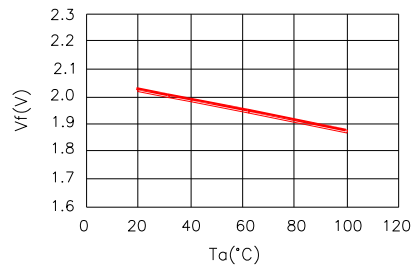


Fig.5-Forward Voltage(@20mA) vs. Ambient Temperature

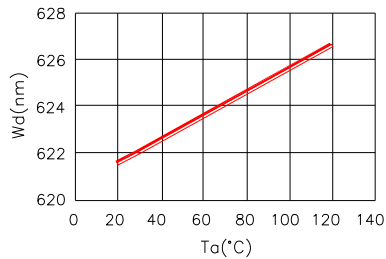


Fig.6-Dominant Wavelength(@20mA) VS. Ambient Temperature

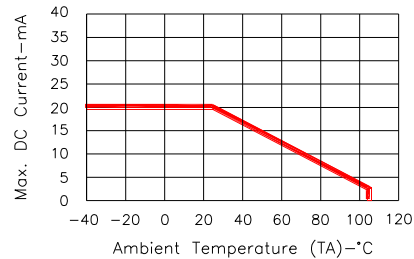


Fig.7-Max. Allowable DC Current VS. Ambient Temperature

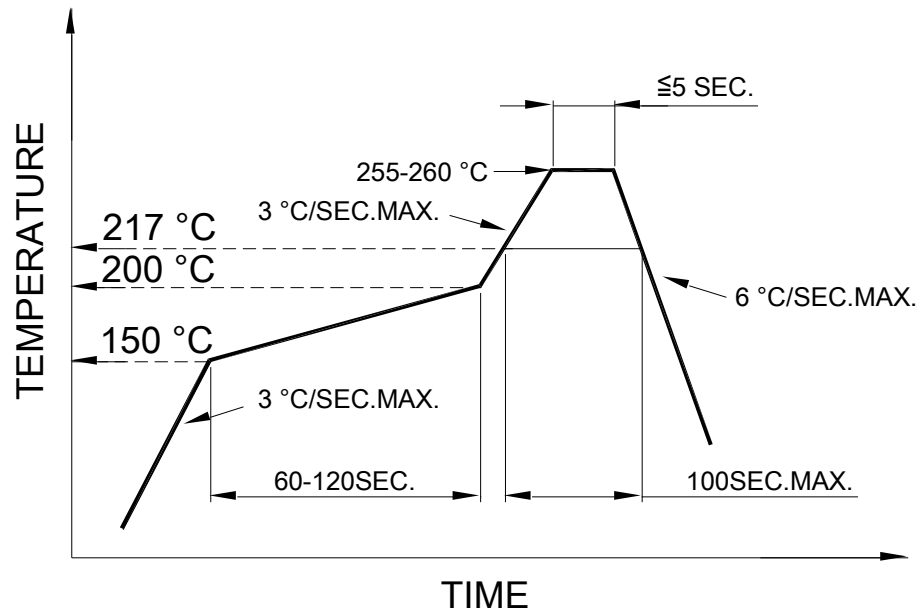


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SOLDERING CONDITIONS – SMD TYPE LED
● SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow soldering Profile


● SOLDERING IRON

Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C → 1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

● REWORK

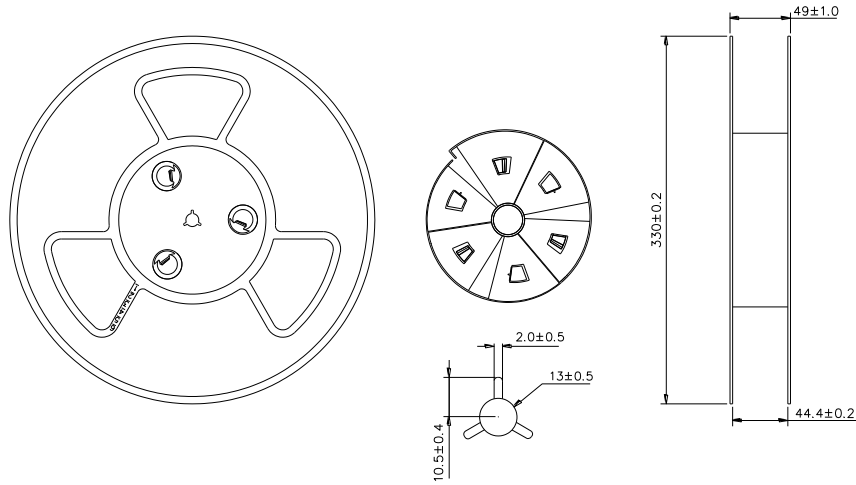
- Customer must finish rework within 5 sec. under 260°C.
- The head of soldering iron cannot touch copper foil.



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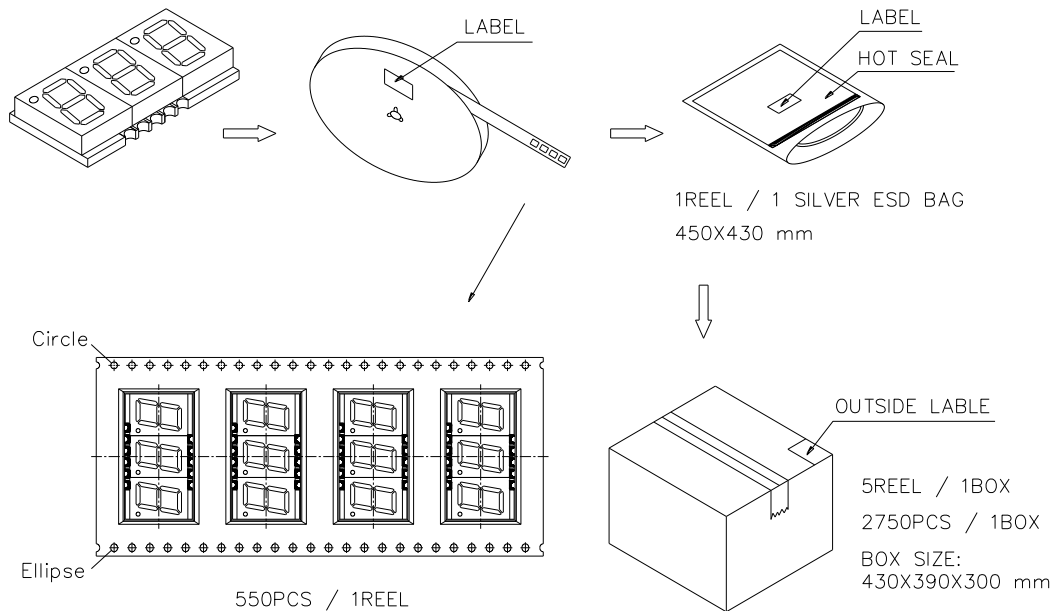
DIMENSIONS OF TAPE (Unit: mm)

● **REEL DIMENSIONS**



PACKAGING SPECIFICATION

● **PACKING & LABEL SPECIFICATIONS**



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